

## GLOSSARY

**Access / Maintenance Easement:** Refers to the required access and maintenance easement to a structural stormwater management improvement or facility from the public Right-of-Way (R.O.W.) and includes the Drainage Maintenance and Utility Easement (D.M.U.E.) around the improvement or facility.

**Alternative Structural Best Management Practice:** Typically facilities other than dry detention and wet detention pond facilities designed to reduce the pollutant loading of stormwater runoff and in some cases reduce the stormwater runoff discharge rate. The City encourages the implementation of alternative and innovative best management practices, where appropriate.

**Anti-Seep Collar:** A metal plate or other device that connects to the outside of a structure that extends through a dam and serves to redirect seepage pathways to minimize the quantity of seepage along the structure.

**Anti-Vortex Device:** A device placed in a outlet riser structure to prevent a vortex, or whirlpool, from occurring when the outlet is acting as an orifice.

**Baffle:** A berm or barrier made of earth, rock, etc., or other diversion used to direct flow or trap sediments within a structural BMP.

**Best Management Practice (BMP):** An activity, design or planning technique, or structural device that is used singularly or in combination to protect the quality of receiving surface waters, reduce the volume of stormwater runoff generated, and/or reduce the stormwater runoff discharge rate.

**Bioretention Area:** A structural BMP that removes pollutants in stormwater runoff through filtration and plant uptake. The bioretention BMP consists of a “made” planting soil layer, mulch, plantings, and an underdrain system.

**Bioretention Area Landscape Plan:** Plan required for City approval of this BMP for water-supply watershed protection, which shows the plant types, quantity, and location.

**Building Certificate of Compliance:** Permit issued by the City Building Inspections Department that signifies that the building is in compliance and may be occupied.

**Built-Up Area:** Term used in City Ordinance Section 30-7, Water-Supply Watershed Districts, and Section 27-22, Stormwater Management Control. Defined as impervious or partially impervious cover including buildings, pavement, gravel areas, recreation facilities, such as tennis courts, etc.

**Catch Basins:** Structures, which are connected to storm sewer pipe, used to collect stormwater runoff from the land surface, such as roads and parking lots.

**Channel:** Man-made or naturally formed conveyance that is well defined and may convey stormwater runoff, intermittent, or perennial streams.

**Check Dam:** A dam placed within a conveyance such as a swale or channel to slow the velocity of flow or temporarily detain the flow.

**Chimney Drain:** A seepage control device used in earth dams.

**Clustering:** As it pertains to stormwater BMP, site development practice where development is concentrated away from environmentally sensitive areas and the amount of impervious surfaces is reduced as a result of concentrating the development in one place as opposed to spreading out over the entire site.

**City of Greensboro Stormwater Master Plan:** A comprehensive stormwater management master plan that is to include all major watersheds and sub-watersheds in the City. The master plan for a given watershed/sub-watershed will guide the development of on-site and/or off-site stormwater management facilities and practices to meet stormwater quantity and quality management goals, in addition to environmental and watershed restoration objectives, as determined by a group of representative stakeholders.

**Conservation or Floodplain Easements:** Easements provided along environmentally sensitive areas and/or major streams that have mapped floodplains.

**Dam Hazard Potential:** An estimate of the extent of damage that a dam would do if it were to fail. The hazard potential is classified by the State Dam Safety Office as low, intermediate, or high.

**Dam Safety Regulations:** Regulations (Dam Safety Law of 1967 and Administrative Code Title 15A Subchapter 2K) regarding the construction, repair, alteration, or removal of a dam. These regulations are enforced by the NC Dam Safety Office, Land Quality Section.

**Dam:** A structure and appurtenant works erected to impound or divert water, as defined by the Dam Safety Law of 1967.

**Dead Storage Zones:** Term used to describe areas within pond BMPs (wet detention ponds, stormwater wetlands) that are not within the flow path between the inlet and outlet. These areas may be created where the BMP is an irregular shape and/or where the pond width goes back and forth between narrow and wide.

**Deep Water Zone:** One of the depth zones in the stormwater wetland BMP. The deep water zone, which consists of a forebay and outlet micropool, comprises approximately 30% of the wetland surface area and is usually 4-6 feet deep.

**Depth Zones:** Term used to describe the varying depths within a stormwater wetland BMP. The depth zones include the deep water zone, which consists of forebay and outlet micropool, and a shallow water zone, which consists of the low marsh, and high marsh.

**Detention:** Temporarily storing water and slowly releasing it.

**Development:** Any manmade change to real estate, including buildings or other structures, mining, dredging, filling, grading, paving, excavation, or drilling operations; or storage of equipment or materials (from Watersupply watershed (Chapter 30) Ordinance).

**Disconnection:** Directing stormwater runoff from impervious surfaces to pervious surfaces to provide water quality improvement through contact with pervious cover, allow infiltration, and decrease peak discharge, before the runoff is discharged from the property or into a conveyance system.

**Drainageways:** Usually refers to areas where the topography forms a small “valley” that is not well defined and conveys stormwater runoff to streams or other water bodies.

**Dry Detention Basin:** A structural BMP that does not have a permanent pool but temporarily stores stormwater runoff and slowly releases it. This BMP has moderate pollutant removal capability but can provide an excellent means for reducing peak discharge rates.

**Energy dissipator:** A device such as rip rap pad, block baffles, etc. that is placed downstream of an pipe or channel outfall to reduce the velocity of the flow.

**Enforcement Officer:** City stormwater staff responsible for reviewing plans for compliance with the stormwater management requirements of this Ordinance.

**Erosion:** The wearing down or removal of land surface by flowing water, wind, ice, etc.

**Extended Detention:** To detain water for an extra length of time to achieve better pollutant removal efficiency (usually 24 hours or more).

**FEMA:** Acronym for the Federal Emergency Management Agency. This agency regulates development activities in designated floodplain areas.

**FEMA Certificate of No Rise:** Certification with supporting technical data that states that there will be no increase in flood levels as a result of a project that develops in the floodway.

**FEMA Conditional Letter of Map Revision (CLOMR):** FEMA’s approval of the proposed changes to an effective FIRM for proposed placement of fill or other physical measures that result in changes to the floodplain elevation or floodway.

**FEMA Flood Insurance Rate Map (FIRM):** Map in which FEMA has delineated both the special flood hazard areas and the risk premium zones.

**FEMA Floodplain:** Area along designated streams that have the potential to flood during the 100-year storm event.

**FEMA Floodway:** Area along designated streams that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height (for Greensboro, one (1) foot) (as defined by FEMA).

**FEMA Letter of Map Revision (LOMR):** FEMA's modification to an effective FIRM based on the placement of fill or other physical measures that result in changes to the floodplain elevation or floodway.

**Fetch:** Refers to the length across the surface of a pond, lake or reservoir, in which wind may act upon.

**Filter and Drainage Diaphragm:** A sand and gravel layer placed around a structure that extends through a dam, to capture seepage and safely convey it to the downstream side of the dam.

**Filter Strip:** A structural BMP that is designed to receive stormwater runoff that is in the form of sheet flow. The strip is a uniformly graded piece of land that is slightly sloped to provide positive drainage. The filter strip is densely planted with grass, which filters the stormwater as it flows across the strip.

**First Flush:** Term to describe the initial quantity of runoff from developed areas. It is generally accepted that the majority of pollutants are washed off by the initial runoff.

**Floatable:** Any material that floats on water such as oil, wood, leaves, paper or plastic litter, etc.

**Floodplain:** The area adjacent to the stream that is subject to flooding when the stream overtops its banks during storm events (usually associated with the area inundated by the 100 year storm event).

**Flow Spreader:** A device that takes flow that is concentrated or overland flow and spreads the flow to create sheet flow. The flow spreader may be a gravel diaphragm or trench.

**Forebay:** A feature in the wet detention pond and stormwater wetland. The forebay is placed at the inlet area of the pond and is separated from the rest of the pond by a baffle. The forebay serves to trap coarse sediments from the inflow to minimize accumulation in the remaining portion of the pond and wetland area, making sediment cleanouts easier and minimizing disturbance.

**Freeboard:** The difference between the maximum elevation of the water level during a specified storm and the top of impoundment or conveyance structure in which the water is contained.

**Geographic Information System (GIS):** An innovative computer system used to visualize, query, and analyze data that is spatial in nature.

**Grass Paving:** A technology that incorporates paver units that allow grass to grow between and is able to support vehicular loading. This technology was designed mainly to provide a developer a more aesthetically pleasing option to asphalt or concrete pavement, but also can provide benefits to stormwater management. Grass pavers are generally placed in areas that are infrequently used areas such as fire lanes, overflow parking, access roads, etc.

**Herbaceous Plant:** A plant whose stem above ground does not become woody.

**High Marsh:** Term to describe one of the depth zones in the stormwater wetland BMP. The high marsh has a depth of 0 to 9 inches and comprises approximately 35% of the wetland surface area.

**High-Density Development:** Term used in the City's Water-Supply Watershed Protection Ordinance. Defined as development where the built-upon area or density (single family detached homes) or the built-upon area (all other development) exceeds the applicable limits specified in the ordinance.

**Hydrologic / Hydraulic Analysis:** For purposes of this manual, hydrologic analysis involves procedures and techniques to estimate the transformation of precipitation or rainfall into surface stormwater runoff in terms of runoff volume and/or runoff rate. Hydraulic analysis generally refers to hydraulic engineering procedures and techniques to evaluate the storage and outflow (discharge) characteristics of stormwater runoff with respect to engineered structural stormwater facilities or improvements, analysis of closed conduit drainage systems, and/or a hydraulic backwater analysis necessary for determination of floodwater elevations for an open channel segment.

**Hydrology:** An earth science that encompasses the occurrence, distribution, movement, and properties to the water of the earth.

**Impervious surfaces:** Generally man-made hard surfaces that are placed over natural soils or surfaces that do not allow infiltration of stormwater into the soils, or that greatly reduce the amount of infiltration, including building rooftops, pavement, paved or gravel roads/driveways/sidewalks/parking areas, and paved recreational areas.

**Infiltration:** Percolation of water into the ground.

**Intermittent Streams:** Refer to the definition in Ordinance Section 30-2-2.2.

**Jurisdictional Streams/Wetlands:** Streams and wetlands that are under the jurisdiction of the US Army Corps of Engineers.

**Length to Width Ratio:** Term used to describe the geometry of the stormwater BMP surface. Generally for pond BMPs (wet detention ponds, stormwater wetlands), the BMPs pollutant removal efficiency increases as the flow path between the inlets and outlets increases, therefore, for these BMPs the length to width ratio is defined as the length of the flow path to the width of the flow path.

**Licensed Professional Engineer:** A Professional Engineer (P.E.) duly licensed by the appropriate State Board in the State of North Carolina.

**Low Flow Orifice:** Outlet works that releases detained water to a desirable discharge rate or detention time.

**Low-Density Development:** Term used in the City's Water-Supply Watershed Protection Ordinance. Defined as development where the density (single family detached homes) or the built-upon area (all other development) does not exceed the applicable limits specified in the ordinance.

**Maintenance Plan:** Short-term and long-term inspection and maintenance activities that are generally necessary to maintain the functionality and safety of stormwater management facilities.

**Microtopography:** Term used to describe the varying depth zones within a stormwater wetland BMP. Microtopography is important in establishing a diverse wetland plantings, and extending the flow path between the inlet and outlet.

**Municipal Separate Storm Sewer System (MS4) Discharge Permit:** NPDES Stormwater Permit, that is required for municipalities with a population over 100,000 (Phase I). The Permit requires these municipalities to develop and implement a Stormwater Quality Management Program (SWQMP) to control the discharge of pollutants from the municipal separate storm sewer system to the maximum extent practicable.

**New Development:** Any land disturbance activity occurring on undisturbed land that results in vegetation/tree removal, grading, filling, placement of impervious surfaces or that otherwise decreases the infiltration capacity of the land.

**Non-Structural BMPs:** Techniques incorporated in site design/planning to reduce the volume of runoff generated, reduce runoff discharge rates and provide partial pollutant removal.

**NPDES:** Acronym for the EPA's National Pollutant Discharge Elimination System.

**(One Hundred) 100-Year Storm:** The precipitation volume or intensity that has a 1% probability of being equaled or exceeded during a given year.

**Open Vegetated Conveyance:** Any ditch, channel, swale or flat strip of land that is covered with vegetation (forest, unmaintained growth, grass, or landscape covering) and conveys stormwater runoff.

**Outfall:** The end of a stormwater conveyance, such as a pipe, swale, channel, etc. where the flow is discharged to another conveyance system.

**Outlet Micropool:** Term to describe one of the deep water zones within a stormwater wetland BMP. The outlet micropool is a pool around the outlet to allow the low flow orifice and pond drain to operate properly.

**Owner's Association:** An association of property owners established when there is more than one owner of a permanent structural stormwater management facility or improvement. The association will be responsible for the obligations, liabilities, and maintenance activities associated with stormwater management improvement ownership.

**Perennial Streams:** Streams, and lakes and ponds along them, that are indicated as being perennial 1) on the most recent version of the US Geological Survey 1:24000 scale (7.5 minute quadrangle) topographic maps, 2) on the most recent version of the Soil Survey map developed by the USDA – Natural Resource Conservation Service, or 3) by an examination of site-specific evidence by the City Storm Water Services Division using criteria approved by the NC Division of Water Quality. However, if the above-mentioned map indicates an area as a perennial stream but the Storm Water Services Division finds no perennial water body actually exists on the

ground, that area shall not be deemed a perennial stream. Ponds and lakes created for animal watering, crop irrigation, or other agricultural uses that are not part of a natural drainageway are not streams. If the City of Greensboro develops a detailed stream network map covering one or more watersheds, then within the watersheds covered by that map perennial streams shall thenceforth be as shown by that map.

**Perimeter (Delaware) Sand Filter:** A type of sand filtration facility developed in Delaware where the facility is placed underground along the perimeter of impervious areas such as parking lots.

**Pollutant Loading:** The quantity of pollutants that are discharged to surface waters by means of stormwater runoff, discharge of non-stormwater, or groundwater contamination.

**Pollutant:** Substances or chemicals that are harmful or degrade the quality of surface waters and associated habitat, such as sediment, nutrients, bacteria, chemicals, etc.

**Pollution Prevention BMPs:** Activities implemented to control pollution at the source by preventing pollutants from commingling with stormwater runoff.

**Post-development peak discharge rates, 2-year:** The peak flow rate of stormwater runoff that results from a land area *after* it is developed or redeveloped during a precipitation event based on an amount of precipitation that has a 50% probability of being equaled or exceeded in a given year.

**Post-development peak discharge rates, 10-year:** : The peak flow rate of stormwater runoff that results from a land area *after* it is developed or redeveloped during a precipitation event based on an amount of precipitation that has a 10% probability of being equaled or exceeded in a given year.

**Pre-development peak discharge rates, 2-year:** The peak flow rate of stormwater runoff that results from a land area *before* it is developed or redeveloped during a precipitation event based on an amount of precipitation that has a 50% probability of being equaled or exceeded in a given year.

**Pre-development peak discharge rates, 10-year:** The peak flow rate of stormwater runoff that results from a land area *before* it is developed or redeveloped during a precipitation event based on an amount of precipitation that has a 10% probability of being equaled or exceeded in a given year.

**Proprietary Stormwater Treatment Facilities:** Patented structural BMPs that have been developed to remove pollutants in stormwater runoff.

**Public Waters:** Surface stormwater runoff from (City-owned) public lands such as streets, parks, parking lots, etc.

**Receiving Waters:** Surface waters that receive stormwater runoff or groundwater seepage.

**Redevelopment:** Any land disturbance activity occurring on previously developed land that results in vegetation/tree removal, grading, filling, placement of impervious surfaces or otherwise decreased infiltration and retention capacity of the land.

**Regional Stormwater Management Facility:** A structural management practice established by one or more local governments for the purpose of managing stormwater from multiple properties.

**Riser/barrel:** A pond outlet works that consists of a vertical, standpipe (riser) on the upstream side of the dam to control the water level, connected to a pipe (barrel) that runs through the dam and discharges on the downstream side.

**Runoff/Pollution Control BMPs:** Site design/planning practices, or structural facilities that serve to reduce the total volume of runoff generated, reduce peak runoff discharge rates, and provide surface water quality improvement by minimizing impacts to environmentally sensitive areas and by removing pollutants from stormwater runoff.

**Safety Bench:** A recommended feature for all stormwater BMPs that have a permanent pool. The safety bench is a flat or gently sloped area around the permanent pool elevation and serves to separate the pool from the embankment.

**Sand Filtration Facility:** A structural BMP that removes pollutants in stormwater runoff through sedimentation and filtration. The sand filtration facility consists of sedimentation chamber/basin and sand filter chamber. There are three main designs: the underground or DC sand filter, perimeter or Delaware Sand Filter, and surface sand filter.

**Scoresheet:** Refers to the scoresheet provided in Section 30-7-1.11 of the Greensboro Code of Ordinances. Developments in the General Watershed Area that are classified as low density may be approved by the City for watershed protection if they have a passing score on the scoresheet.

**Seepage:** As it pertains to dam seepage, flow of water through the dam, foundation, or ground from the upstream side of the dam to the downstream side.

**Sedimentation:** The process of suspended particles settling out in slow moving receiving waters.

**Sedimentation Chamber:** The portion of a structural BMP (such as sand filtration facility) that is designed to settle out coarse sediments.

**Shallow Water Zone:** Term to describe one of the depth zones in the stormwater wetland BMP. The shallow water zone, which consists of the low marsh and high marsh, comprises approximately 70% of the wetland surface area and has a depth of 0 to 18 inches.

**Sheet Flow Runoff:** Runoff that is overland flow and is not concentrated into a conveyance system.

**Skimmer Baffle:** Baffle used in a structural BMP or spill containment structure, designed to trap floatable material, such as oil, litter, gasoline, leaves, etc. Usually consists of a sheet of metal or plastic or concrete wall that placed across the control structure and extending below the permanent pool trapping floatables on the upstream side of the baffle.



**Spillway:** Outlet works designed to discharge water during a storm event from a water body once it reaches a certain elevation.

**Stabilization (Site):** Condition where the soil is no longer exposed. For filtration BMPs it is crucial that the site is stabilized before placement of the filter material, which includes completion of paving and landscaping (seeding with straw and/or mulch).

**Storm Sewer:** Structures associated with collecting stormwater and conveying it subsurface to a downstream outfall. Structures include pipe, catch basins, and junction structures (manholes).

**Storm Sewer Design Manual:** Refers to the guidance manual developed by the City Engineering Division for storm sewer system design.

**Storm Water Management Ordinance:** Chapter 27 of the Greensboro Code of Ordinances provides Storm Water Services with the legal authority to administer the City's NPDES Stormwater Permit. Section 27-22 of this Ordinance, adopted by City Council in 1999, sets forth the stormwater management control requirements for new development.

**Storm Water Services:** Division under the City of Greensboro Environmental Services Department. Responsible for implementation and enforcing the City's Municipal Separate Storm Sewer System Discharge Permit and development of a comprehensive stormwater management program for the City.

**Storm Water Utility Fee:** Fee that is assessed to all City of Greensboro properties to fund the Storm Water Services Division. Residential properties are charged a flat rate, while the fee for non-residential properties is based on the amount of impervious surface that is on the property.

**Stormwater:** Precipitation.

**Stormwater Conveyance System:** System used to convey stormwater runoff to downstream receiving waters. The conveyance system may include storm sewer, open channels/swales, structural BMPs, etc.

**Stormwater Infrastructure Management System (SWIMS):** A proactive program developed by the City of Greensboro to optimize maintenance of the public storm sewer system through use of the information gathered by stormwater infrastructure and conveyance system inventory, land use data, and other sources.

**Stormwater Management Control:** Typically, a structural device used to manage the quality and/or quantity of stormwater runoff.

**Stormwater Management Manual:** Provides requirements and guidance for meeting the requirements of Ordinance Section 30-7, Water Supply Watershed Development, and Section 27-22 of the Storm Water Management Ordinance.

**Stormwater Management Improvement:** A stormwater management control, non-structural/structural BMP, upgrade to existing conveyance system, etc., implemented to reduce negative stormwater impacts associated with development.

**Stormwater Management Plan:** This plan is required for all proposed new development or redevelopment by Section 27-22 of the Greensboro Code of Ordinances, Stormwater Management Control Requirements. The plan must address the requirement specified in the ordinance and be prepared in accordance with the guidelines of the Stormwater Management Guidance Manual., such as engineering analysis of impacts to downstream storm sewer systems and property as a result of increased runoff, measures to control increased runoff to prevent flooding, drainage, or erosion problems, and buffers along streams and major drainageways.

**Stormwater (Watershed) Master Plan:** A comprehensive stormwater management master plan that is to include all major watersheds and sub-watersheds in the City. The master plan for a given watershed/sub-watershed will guide the development of on-site and/or off-site stormwater management facilities and practices to meet stormwater quantity and quality management goals, in addition to environmental and watershed restoration objectives, as determined by a group of representative stakeholders.

**Stormwater Pollution Prevention Plan (SWPPP):** Requirement of the NPDES Industrial Stormwater Permit. Details stormwater BMPs and other practices to eliminate discharge of pollutants from industrial facilities via stormwater runoff.

**Stormwater Quality Management Program (SWQMP):** Requirement of the municipal NPDES Stormwater Permit. Details activities that the City will implement to control the discharge of pollutants from the municipal separate storm sewer system to the maximum extent practicable, including, but not limited to, public education and awareness, stormwater runoff and stream monitoring, storm sewer and conveyance system inventory, identification of illicit discharges and improper disposals, and erosion and sedimentation control.

**Stormwater Runoff:** Rainfall that does not infiltrate into the ground and flows as surface water.

**Stormwater Runoff Discharge Rate:** The volumetric rate of runoff that leaves a particular area of interest over a specified time interval.

**Stormwater Utility Credit Policy:** City of Greensboro policy to issue credit to properties that implement on-site stormwater BMPs designed to reduce the discharge of pollutants to surface waters, and minimize stream and property damage by decreasing flowrates. The BMPs eligible for credit are referred to in this manual and the Stormwater Utility Credit Policy document.

**Stormwater Utility Fee:** Fee charged to all properties to fund the City Storm Water Services division. The fee is a flat fee for single family detached residential homes and based on the amount of impervious surfaces for other residential and non-residential properties.

**Stormwater Wetlands:** A structural BMP that consists of a permanent pool, temporary pool, and varying depth zones (microtopography) to establish wetland plantings.

**Stream Buffers:** Land along streams, drainageways, and other water bodies, which are provided to protect the quality of the surface waters, and minimize structure or improved property damage due to flooding or changes in the stream channel (for example, widening, deepening or meandering).

**Stream:** Natural body of concentrated flowing water in a natural low area or natural channel on the land surface (NC Division of Water Quality).

**Structural BMPs:** Defined as “engineered” stormwater management facilities designed to improve the quality of stormwater runoff and reduce stormwater runoff rates. They use processes such as sedimentation, plant uptake, filtration, microbial activity, etc. to remove pollutants from stormwater runoff. They can use the storage to control stormwater runoff to also help reduce peak discharges.

**Sub-Basin (Sub-Watershed) Master Plan:** A plan that identifies existing and potential future stormwater quality and quantity problems for a designated drainage basin within the city through hydrologic/ hydraulic and water quality/pollutant load modeling utilizing data collected on the City’s land use, topography, surface water conveyance system, monitoring activities, etc., and identifies potential on-site and regional solutions to address the issues in a holistic and stakeholder driven manner.

**Surface Sand Filter:** A type of sand filtration facility where the facility is placed above ground.

**Surface Waters:** Refers to water that exists on the surface of the earth, such as streams, ponds, lakes, springs, wetlands, stormwater runoff from precipitation events, etc.

**Swales:** Man-made or natural open conveyance of stormwater runoff that is usually designed to convey or treat stormwater runoff has relatively flat side slopes and a wide bottom, as opposed to well defined channels or ditches.

**Technical Review Committee (TRC):** A committee consisting of representatives from various City of Greensboro departments that are responsible for reviewing and approving proposed development activities within the City’s jurisdiction.

**(Ten) 10-Year Storm:** The precipitation volume or intensity that is has a 10% probability of being equaled or exceeded during a given year.

**Time of concentration:** As it refers to hydrology, the time required for 100 percent of a tract of land to contribute to the runoff at the outlet.

**Trash rack:** A device placed on outlet (pipe or box) spillways to prevent the outlet from being clogged with large debris.

**(Two) 2-Year Storm:** The precipitation volume or intensity that is has a 50% probability of being equaled or exceeded during a given year.

**Underdrain System:** A system of perforated pipes placed under the filter beds of filtering BMPs which serves to collect the filtered water and discharge it to the stormwater conveyance system.

**Underground (DC) Sand Filter:** A type of sand filtration facility, developed by Washington DC, where the facility is placed underground.

**Underground Oversized Stormwater Sewer System:** Underground chamber or pipe system used to provide temporary storage (dry detention) to reduce post-development peak runoff rates.

**Urbanization:** Development of land for use as commercial, industrial, residential, and/or other land uses associated with city growth. Urbanization causes increases in impervious surfaces, which in turn causes a decrease in surface water quality.

**Water Balance:** As it relates to structural BMPs, the net presence of water considering precipitation, dry weather flow, storage, evaporation and infiltration. For stormwater wetlands, it is very important to have a water balance that can sustain the plantings.

**Water Quality Volume (WQV):** The storage needed within a structural BMP to control the “first flush” of runoff during a storm event. The “first flush” is designated by the NC Division of Water Quality and City of Greensboro as the first inch of rainfall.

**Watershed:** Land area that contributes surface runoff to any point of interest.

**Watershed Map:** As it pertains to Section 2.2 of this manual, the Guilford County Designated Water Supply Watershed Map, dated June 30, 1991

**Watershed Protection Plan:** Plan required when developing, disturbing, or subdividing land that is in the City’s water-supply watershed area. The plan must meet the requirements of the Water-Supply Watershed Protection Ordinance.

**Water-Supply Watershed Protection Requirements (Ordinance):** Requirements set forth to protect the City’s water-supply lakes and watershed, such as limits on built-upon surfaces, use of stormwater BMPs, and buffer protection of lakes and streams.

**Water-Supply Watershed:** The land area that drains to a water source. Usually associated with water sources for treatment and distribution of drinking water.

**Designated Water-Supply Watershed:** Water-supply watersheds that are designated by the NC Environmental Management Commission for protection by their regulations.

**Watershed Critical Area:** The area designated around a water-supply reservoir, that is restricted further from development activities and land use than the General water-supply watershed area.

**Watershed General Area:** The area that is within a designated water-supply watershed area that is not watershed critical area.

**Wet Detention Pond:** A structural BMP that is used to remove pollutants from stormwater runoff and, if desired, provide peak reduction. The pond consists of a permanent pool; a temporary pool, which is designed to be above the permanent pool, to store the water quality volume; and a forebay, which is constructed at the inlet area to trap larger sediments.

**Wetland Planting Plan:** Plan required for City approval of this BMP for water-supply watershed protection, which shows the planting types, quantity, and location.